

January 26, 2010



U.S. Department  
of Transportation

East Building, PHH – 30  
1200 New Jersey Avenue, Southeast  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 12087  
(EIGHTH REVISION)

EXPIRATION DATE: December 31, 2013
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(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: LND, Incorporated  
Oceanside, NY
2. PURPOSE AND LIMITATIONS:
  - a. This special permit authorizes the manufacture, marking, sale and use of non-refillable, non-DOT specification cylinders for the transportation in commerce of Boron Trifluoride. The cylinders are described as electron tubes that are part of radiation detectors. This special permit provides no relief from the Hazardous Materials Regulations other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
  - c. Party status will not be granted to this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Column 9 in that Boron Trifluoride is forbidden by air, except as specified herein; the labeling and placarding requirements of Part 172, except when transported by air; § 173.302a(a)(1) and § 175.3 in that the prescribed packagings are not authorized; and in the ICAO Technical Instructions Table 3-1, Columns 9, 10, 11, and 12.

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5. BASIS: This special permit is based on the application of LND Incorporated dated October 28, 2009, submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Boron Trifluoride	2.3	UN1008	NA, Hazard Zone B

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are non-refillable, non-DOT specification cylinders described as electron tubes. The electron tubes are constructed of stainless steel or aluminum. The tubes have welded, soldered, or solder glassed joints, and brazed metal to ceramic electrical feed-through assemblies. The maximum tube volume is 238 cubic inches and the maximum operating pressure is 25 psig. The design burst pressure of each electron tube must be at least 4 times the operating pressure but no less than 100 psig. Each electron tube must be manufactured in accordance with LND, Incorporated drawings on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA).

b. OPERATIONAL CONTROLS -

(1) Electron tubes must be shipped in strong outside packagings that are capable of withstanding a drop of 6 feet without breakage or rupture of the outside packaging or the contents.

(2) If repackaged, packagings used to ship larger equipment containing radiation sensors covered by this special permit must be strong outside packagings providing equivalent protection for the devices as specified in paragraph 7.b.(1) of this special permit.

(3) For international shipment by aircraft, electron tubes must first be tightly packed in either UN steel open-head drums or in the container shown on LND, INC. drawing number 2-920-0058-00, on file with OHMSPA. The size of the outer metal container must be chosen in such a way that leakage from all radiation sensors will not cause the contained pressure to exceed 4 psi, according to the leakproofness test for UN specification drums containing Packing Group I materials. The outside metal container must then be packaged in strong outside packaging as specified in paragraph 7.b.(1) of this special permit.

(4) Notwithstanding § 175.3, packagings prescribed by this special permit may be shipped by passenger or cargo aircraft in packages of no more than 57 grams of Boron trifluoride each.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a packaging covered by this special permit, may reoffer it for transportation provided no modification or change is made to the packaging and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

- f. Except when transported by air, packages prescribed by this special permit are excepted from 49 CFR Part 172, Subparts E (labeling) and F (placarding).
- g. Transportation of Division 2.3 (gases which are poisonous by inhalation) are not authorized aboard cargo vessel unless specifically authorized in the Hazardous Materials Table (§ 172.101).
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger aircraft.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by § 172.700 through § 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

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Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Dr. Magdy El-Sibaie  
Acting Associate Administrator for Hazardous Materials Safety  
Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm) Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: CWFreeman/sln